

CHAPTER 3

CONDUCTING SEARCHES

A. DATA BASE ORGANIZATION

The data base is not unlike an electronic file cabinet. The data base is divided into records, each of which **is** a "document," a DD Form 1995-2 in the case of the Products file, or a DD Form 2054/1 and /2 in the case of the Facilities file. Each record is composed of fields. These fields are **analogous** to the blanks on the forms they represent. A field may contain a date, alphanumeric information or an integer number. The fields in **DAVIS** have the same names as their corresponding blanks on the **DD Forms** 1995-2 or 2054. They will be preceded by an "I" if the field is an alpha field and **by** an "R" if it is numeric. For example:

DD Form 1995-2 Item Name	DAVIS Field Name
2C	12c
4A	14A
10A	R10A
17A	R17A

(**NOTE:** In each data base, there are some fields which are not part of the form that is represented by the records. These **fields** are used for **searching** and **administrative** purposes. There are **also** "mapped" fields. These are special fields which are really a combination of other fields to make searching or displaying information faster. These fields are outlined in Chapter 5).

B. ACCESSING

After you have logged into the computer and selected the BASIS option from the menu, (see Chapter 2, Section B) you will be asked to give the identification for the data base you wish to use. (For the purpose of this guide, we will show examples of searches using the Products data base (D201).)

The proper way to specify the complete Products data base ID is:

D201,1D=PRODUCTS

The computer will log you into BASIS if you spell everything correctly. In place of PRODUCTS, you may use any Service specifier such as NAVY, AIR FORCE, ARMY, OR MARINE. This will give you access to only the files which are identified for those specific Services.

That is:

For the entire current and obsolete Products file, enter:

D201,1D=PRODUCTS

For the current Army Products only, enter:

D201,ID=ARMY

For the current Air Force Products only, enter:

D201,ID=AIRFORCE

For the current Navy Products only, enter:

D201,ID=NAVY

For the current Defense Products only, enter:

D201,1D=DEFENSE

For the current Marine Corps Products only, enter:

D201,ID=MARINE

The computer will now respond:

BASIS DATA BASE 201 IS ONLINE
LAST UPDATE WAS 820801 at 233521

Now that you are logged into **BASIS**, you will see the standard BASIS "1/" prompt. All commands in BASIS will be entered at that prompt. Actually, the slash is the **prompt**, the number is **the** line number you are on. This number will become very important later. It **is** really the document set **number**, identifying a set of documents (**DD Forms** 1995-2 or 2054/1 and /2). **Thus**, since every command you enter will not always create a new **document**, the number will not always advance on a new line. Whenever you see a number followed by a slash (1/) you will know that: (1) you are in the BASIS module; (2) you are being asked 'to enter your next command; and (3) it is the number of your current document set.

C. The FIND Command

Entering FIND allows you to select one or more records that have a specific characteristic. You may use FIND to locate one document by its accession number or by one unique item for that document. Or you may define a particular characteristic and use FIND to gather a collection of documents which share that characteristic.

1. Accession Number Search. Each record or document in a BASIS data base has one field that is unique to that record. It is the key field and is called the accession number, or **RACNUM**. No two records may contain the same **RACNUM**. This number is very important for reference purposes. To find a document with a known **RACNUM**, the entry would look like this:

```
Response: 1/ FIND RACNUM=107612
           1 1/RACNUM=107612
```

As **you can** see, the computer response tells you there is one document meeting that criteria, and that a document set has been created. The characteristics of that document set are:

1. It is set number one.
2. It consists of **all** the documents where RACNUM equals 107612 (one DD Form 1995-2, of course).

Since the RACNUM is probably the only single unique field in a DD Form 1995-2, it is the one to use when searching for a single document.

2. Subject Search. Usually, you will want to assemble a document set with one or more characteristics in common. For example: Suppose you need all the products with the word "Planet" in the title, your FIND would be like this (using the field 12A as an example):

```
2/ FIND I2A=PLANET
   28 2/12A=PLANET
```

There are apparently 28 products with "Planet" in the full title (12A) field. You have assembled those products into a document set, set number two. (The ANY search requires the user to search for both the singular and plural forms of the search term.)

Note: In this guide, the terms "products" and "productions" are used interchangeably.

If you wanted a set of only the products with the words "Planet" and "Earth" in the title you would structure the FIND thus:

```
3/ FIND 12A=(PLANET AND EARTH)
   28      3 /12A=PLANET
   37      4 /12A=EARTH
   11      5 /12A=(PLANET AND EARTH)
```

You have created three document sets here. The computer had to perform a logical operation; first, it had to find all the products with the word "Planet" in the title, then all the products with the word "Earth" ; and then it had to find, from those two sets, how many contained both words. This feature is particularly useful if you are searching for, say, a title to a film. The computer can search only one word at a time; so the logical operators make it possible to search for many words. If you are searching for more than one word in a given field, you must use parentheses around the words and their logical operators. There are two other logical operators, we will illustrate them both.

```
6/ FIND 12A=(BATTLESHIP OR DESTROYER)
   28      6 /12A=BATTLESHIP
   12      7 /12A=DESTROYER
   34      8 /12A=(BATTLESHIP OR DESTROYER)
```

Here, we have a document set containing all the productions with either "battleship" or "destroyer." (Special Note: In the above search, why is not the "answer" to the number of records containing "battleship or destroyer" equal to 40, since there are 28 records with "battleship" and 12 with "destroyer"? Because in some of the records both words were present, and the computer recognizes this as an "AND" situation, which very literally does not "count" for an "OR" search. If you understand this BASIS characteristic, you will be an expert in conducting "AND" and "OR" **searches!**)

Certain characters are not allowed in a normal FIND statement; the comma, for example. Suppose you are looking for the film title "20,000 Volts Under the Hood." FIND 12A = 20,000 will cause an error message to appear because of the comma in the number. To force **the computer** to 'accept this, enclose the statement using 20,000 in double quotation marks. The full statement would look like this:

```
7/ FIND 12A =( "20,000'" AND VOLTS AND UNDER AND HOOD)
```

The quotes are used to enclose a literal; "that is, something we want the computer to accept without question.

In addition to the "AND" and "OR" we can use "AND NOT" for searches:

```
9 / FIND 12A= (AIRCRAFT AND NOT MAINTENANCE)
    28      9/1 2A=AIRCRAFT
    9      10/12 A=MAINTENANCE
    19      1 1/12 A=(AIRCRAFT AND NOT MAINTENANCE)
```

Here, we have a document set with all products having "aircraft" but not "maintenance" in the title.

3. ANY Search. If you don't know which field a word might be in, you can search all of the fields in the entire document. However, this is an intensive use of computer resources and should be done only as a last resort. This search, known as the ANY search, uses the computer asterisk to signify "find in any field." For example:

```
12/ FIND *=( RADAR AND NIGHT AND AIRCRAFT )
    1147 12/*=RADAR
    9201 13/*=NIGHT
    11421 14/*=AIRCRAFT
    33    15/*= (RADAR AND NIGHT AND AIRCRAFT)
```

We have found a document set with 33 members that has the above terms somewhere in them. When we get to the next section, we will see how to list them to find the one (s) we want.

We may combine different fields in a search like this:

```
16/ FIND *= (AIRCRAFT AND CARRIER) AND I15=HISTORICAL
    11421 16/*=AIRCRAFT
    995    17/*=CARRIER
    1350   18/I15=HISTORICAL
    18     19/*= (AIRCRAFT AND CARRIER) AND I15=HISTORICAL
```

As you can see, a FIND statement could be very long indeed. If any BASIS statement must be more than one line long, be sure to enter a plus sign (+) at the end of the first line **so the computer will know** you have more to say. Place a space prior to the "+" sign. After the "+" enter RETURN, and the computer will prompt you to continue with your command.

Also note: The ANY search will not **depluralize**. For example:

```
20/ FIND *=BELT will find 85 answers,
```

however the search

```
21/. FIND *=BELTS will not find any answers.
```

As a result, if you want to use the ANY search, you must **depluralize** all words to be sure of an accurate search. Before using an ANY search, consider using an appropriate mapped field. (See Chapter 5, Section A) If you use a field name "subject" you will search all the title fields, the descriptor fields and the synopsis field.

4. Range Search. You may also do a search on a range of numbers. This means you may search a field that has numeric information for all documents having numbers meeting your conditions. Here is an example:

```
22/ FIND RACNUM GT 1000000  
    18225    20/RACNUM GT 1000000
```

The computer demands that we use an "R" instead of an "I" at the beginning of a field identification code if we are doing a range search or the field being searched is numeric. In our example, we found all RACNUMS greater than one million. **There** are other options that can be used in place of the "GT" (greater than) :

```
LT--less than; i.e. , RACNUM LT 100000  
GT--greater than (see example above)  
LE--less than or equal to .  
GE--greater than or equal to  
EQ or ==--equal to  
: or /--search between two numbers; i.e. , RACNUM 200000/400000
```

Remember, you can only do range searches on fields which contain numeric information.

5. Stem or Root Word Searches. Upon occasion, you will want to look for word variations on specific words or terms. when stem searching, you must enter the stem or the root word of your search term followed by an asterisk(*) . For example:

```
21/ FIND I2A=TRANSPORT*  
    59 1/12A=TRANSPORT (8 Terms Combined)
```

You cannot use the asterisk (*) at the beginning of a stem (i.e., *PORTABLE). The computer will not allow a "wild card" character in front of a stem.

6. SORT Command. There will be times when you would like a list of documents to be sorted by one or another field before you DISPLAY or PRINT them. The documents in a document set are sorted by the RACNUM automatically when the set is formed. However, by using SORT, you may rearrange the list as you choose.

You must specify the number of the document set you wish to sort. The result will be a new document set. You may do a one, two, or multilevel sort. This means you may sort by one field, and then another field within the first and so on. Here is an example:

```
1/  FIND 12A=PLANET
    28      1/12 A= PLANET
2/  SORT= 1,12A
    28      2/12 A= PLANET SORT= 12A
```

Here we found a document set of 28 items and sorted that list by the 12A, or title field. Notice that we formed a new document set which specified not only the original find, but gave the SORT specification as well. We could have given more than one item on which to sort by simply listing the fields separated with commas. "SORT=. . ." may be entered as SORT if the sort is to operate on the last listed document set.

7. Set Combinations. If you have sorted two or more FINDs and now see that you" need to combine their results, you may do this in one of three ways:

a. With AND--The resulting set will have records which contain the elements of both of the document sets. It will be the same as though we had used a single FIND command with an AND in it. For example:

```
1 / FIND *= SPACE
    435      1/ *=SPACE .
2 / FIND *= TRAVEL
    720      2/ *=TRAVEL
3/ (1 and 2)
```

Document set number three now contains all of the records containing "space" and "travel" in the same document.

b. With OR--The set resulting from sorting with OR will contain all of the elements in either set. For example:

3/ (1 OR 2)

Now, the created document has all documents containing either "space" or "travel, " even if they are not related.

c. With AND NOT--Again, this will operate the same as though you had used a FIND command with the AND NOT operator. The document set which will result from two sets being combined with AND NOT will have all of the elements of the first set which do not contain elements of the second set. For example: using the sets we created above:

3/ (1 AND NOT 2)

The document set resulting from this will have all of the records containing " space" but none of the records containing "travel" in the same document.

D. SAVING DOCUMENT SETS

A document set is what was formed when FIND was entered. The numbered lines indicate the identifying numbers of the document sets they contain. The document set created with a line number of 20 will remain number 20 throughout the BASIS session. It will, of course, be **lost** when BASIS is left intentionally or accidentally. This is usually desirable, but there will-be times when a document set needs to be saved.

To save a particular document set you must take notice of its set or line number. Use the following example is a guide for saving a document set.

```
21/ DOCSET SAVE 11 AIR/HELICOPTER RESCUE  
    11/ I2A=AIR/HELICOPTER AND RESCUE  
    ALL SETS SAVED
```

Let's dissect that DOCSET command. The "SAVE" portion allows us to save this document set permanently. The "11" in the line indicates the line number of the document set we are saving. The first word "AIR" is the name of the document set, and we will use this name to recall the set later. The words after "AIR" are a description used only for reference. Be sure to include the spaces exactly as they are in the example. The name may only be one unbroken string 30 characters long; you may, however use periods instead of spaces to separate words.

To retrieve your stored document set:

```
1/ DOCSET GET AIR  
   ALL SETS RETRIEVED
```

If you forget the name of your **DOCSET**, or have several and want a list, use the **DOCSET SHOW** command at the prompt. You will be given a list of all stored document sets with their names and descriptions. When you no longer need a **DOCSET**, use this command to delete it:

```
7/ DOCSET DELETE AIR  
   ALL SETS DELETED
```

Document sets may be stored for as long as you need them. However, you should delete a **DOCSET** if you no longer need it. Your computer account has a limit on storage space; so it is a good idea to be judicious with permanent storage.

E. UNIVERSES

A universe is the complete set of all documents to be searched. If you entered the data base under **ID=AIRFORCE**, the universe is all current Air Force films. If you entered under **ID=PRODUCTS**, the universe is the entire products data base. It is possible to change the universe at any time. Suppose you want to do several searches in the files where field **R15D** has an historical date. You could type in that qualifier on every **FIND** command you enter but there is a simple alternative. The **SET UNIVERSE** command limits the documents **FIND** can search.

```
4/ FIND R15D GT 0  
   1425 4/R15D GT 0
```

```
5/ SET UNIVERSE=4 or SET UNIVERSE ON
```

The universe is now equal to the set in line four. This means that all future **FIND** commands will search only the set of documents where **R15D** has an historical date. To return to the full **universe** of the data base, use this:

```
5/ SET "UNIVERSE/OFF
```

" F. SEARCH PROFILES

A search profile is a way of storing sets of **BASIS** commands you frequently use. For example, you may be requested several

times a week to FIND a word or words, and then display the same set of fields. You may write a PROFILE which has the commands within it. Execute that PROFILE, and the commands will be performed just as though you had typed them in. The major difference in a PROFILE program and your entering the commands in the normal manner is that, in the PROFILE, you may be asked for variables. This means that each time you run the PROFILE, you will be able to insert different search information in it, to account for your changing needs. If you didn't have a variable in the FIND command, every time you ran the PROFILE, you would be searching for the same words. Using a variable will allow you to give the FIND command different parameters for which to search every time the PROFILE is executed.

Here are the steps in writing a PROFILE. We will explain as we go along.

```
1/ PROFILE MAKE TEST1
```

```
END ADD WITH =
```

```
100=
```

The MAKE command tells the computer you want to write a PROFILE. The word "TEST1" after the MAKE is the name of that PROFILE, you will use this name when it is time to execute the PROFILE.

BASIS informs you that you must end the addition of lines to the PROFILE with the "=" symbol. You will notice the next thing is the "100=." This is the beginning line number. Each line of a PROFILE has a number. It is automatically assigned and a new one will appear as soon as you press RETURN after entering a line. To end the line numbering process (which is called the ADD mode) , enter an "=".

```
100=FIND *=[SEARCH WORDS I
11 0= DISPLAY RACNUM, R1A, 12A, 17, 18A FOR ALL
120==
==> EXIT
```

We have now entered a simple PROFILE. The part of the FIND command, " [SEARCH WORDS]" established a variable. When you run the PROFILE, the computer will ask for that variable. You will be prompted with whatever text is inside the brackets, so running this PROFILE will result in a prompt of "SEARCH WORDS?" For this PROFILE, you would enter the word or words you wanted to search for, with appropriate brackets if there were more than one word.

We entered a "=" when we had no more statements to enter and the profile program gave us a "==" prompt. This prompt means that we may edit our little program or, using the EXIT, we may return to **normal** BASIS operation.

Suppose we had made a mistake in one of our statements. At the ==> prompt, we could have typed the line number of the incorrect line and reentered it like this:

```
==> 110=DISPLAY RACNUM,RIA, 12A,17,18A, I16B FOR ALL
```

The newly entered line replaces the former line **number** 110. If you have made several changes, you may want to see the corrected profile.

At the ==> prompt type LIST to get a complete listing: To delete a line in the profile, type DELETE, a space, and the line number.

After the profile looks correct to you, EXIT it and execute it. Do this by typing PROFILE EXECUTE, or profile X like this:

```
2/ PROFILE X TEST1  
   PARAMETERS TO BE SATISFIED  
   SEARCH WORDS?
```

The computer is prompting you to enter the variables that the FIND command **will** use in its search prior to the DISPLAY. You would enter the words and press RETURN. The computer will then proceed through the statements as though you were actually typing them. You will see the commands appear on the screen and their execution. Since, in our profile, there is a DISPLAY command, you **will** receive all of the displayed material. If you want to save it, turn on your printer when you see the DISPLAY begin to be executed on the screen.

To get a list of all the profiles you have save-d with their **names**, enter:

```
5/ PROFILE SHOW
```

When you no longer need a profile, you should delete it by typing:

```
6/ PROFILE DELETE TEST1
```

Any profiles you save in your account are your own. Nobody can get to them unless they log into the system entering your US ERNAME and PASSWORD. However, there are systemwide profiles that everybody can access. The ones of interest to you are A, B, C, D, and E.

To execute them you enter any of the following:

/A /B /C /D /E

The "A" profile gives access to all the active documents with the NAC files left out. There are several thousand NAC films listed in the data base which you may not want to see. Profiles "A" though "D" automatically exclude them.

The "B" profile gives just the obsolete files, defined by the 115 field being equal to "obsolete."

The "C" profile gives just the canceled products. (These **productions were canceled during the production phase** before completion. Only the current and previous fiscal year's **cancellations** are maintained.)

The "D" profile gives all: active, obsolete, and canceled files included in "A," "B," and "C," above.

The "E" profile selection includes NAC documents along with all active, obsolete and canceled products. This profile is most often used with **the individual service** files (Army, Navy, Air Force, etc.) when it is desired to include obsolete and canceled productions.

N O T ~~When~~ When using these profiles, the search will be performed on the following fields only:

TITLE, SUB-TITLE, SERIES TITLE and WORKING TITLE.
SUBJECT INDEX (Descriptors)
SYNOPSIS

Proficiency in DAVIS use exceeds the limited search capabilities of the user friendly profiles.*

There are three other profiles which offer more flexibility. They are named /ACTIVE, /OBSOLETE and /CANCELLED. While the /A, /B, /C, /D, and /E profiles perform the FIND command for you,

*Their use is discouraged if the user has basic knowledge of constructing BASIS FIND commands.

these profiles simply set up the universe in whatever data base you are in. In searching, if you do not specify fields, the search will automatically be global (everything). To gain access back to the entire data base after using these profiles, enter:

SET UNIVERSE OFF

G. RESTART Command

The RESTART command allows you to leave and reenter the data base with one command. The reason you would use this is to get from one portion of the data base to another. If, for example, you were logged into BASIS using ID=NAVY and you wanted to switch to ARMY, you would use the RESTART command like this:

3/ RESTART D201,ID=ARMY

You will receive the messages indicating you have successfully entered the Army file. If you enter RESTART without following **it** with any data base specifications, you will be prompted for them after you enter RETURN. Executing the RESTART command cancels any universes you have established and wipes out all of your document sets. If you need to save them, use the DOCSET SAVE **command** before you restart BASIS.